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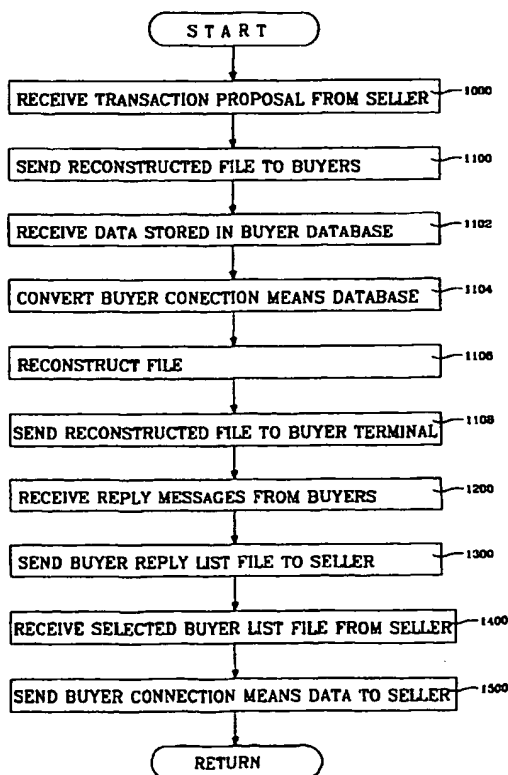
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(54) Title: METHOD AND APPARATUS FOR FACILITATING COMMERCE BETWEEN BUYER AND SELLER



(57) Abstract: An apparatus and method for facilitating commerce between a registered buyer and a seller uses a mediating computer situated between a buyer terminal and a seller terminal. The mediating computer includes a database of registered buyers and acts as a server for processing transactions via a network. A document file is received via the network from the seller terminal at the mediating computer where the document file is reconstructed. The document file is prepared by the seller and contains a transaction proposal for the registered buyer. The reconstructed document file includes product data and is transmitted from the mediating computer to the buyer terminal. Buyer reply data is received via the network from the buyer terminal at the mediating computer and is reconstructed therein into a buyer reply list file including the buyer reply data.

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METHOD AND APPARATUS FOR  
FACILITATING COMMERCE BETWEEN BUYER AND SELLER

BACKGROUND OF THE INVENTION

5 Field of the Invention

The present invention relates to a method and apparatus for facilitating commerce between buyer and seller, and more specifically, to a method and apparatus using a mediating computer to utilize network communication technology to  
10 facilitate existing Internet-based commerce.

Discussion of the Related Art

Electronic commerce, typically that transacted via the Internet, is commerce whereby goods and services are dealt  
15 electronically and includes the exchange of electronic documents.

The main participants of electronic commerce are authorized to take part in such commerce, similar to the participation in brick-and-mortar business. As the core participants of electronic commerce, cyberspace retail outlets supplying goods  
20 and services attract consumers (buyers) of those goods/services, and some type of a cyberspace banking facility or credit provider is required for effecting the transactions.

In a typical electronic transaction as described above, a company or an individual utilizes a general searching engine  
25 on the Internet to search and access web pages of advertisement.

The cyberspace retailer is contacted by sending an electronic document such as an email to the seller (or buyer). Electronic commerce also encompasses business-to-business commerce as

well as business-to-consumer, so that the contact may originate from the seller and be directed to buyer.

Such electronic commerce, however, is subject to many difficulties, which include excessive costs and poor speed and accuracy. For example, buyers suffer a loss of time, and the associated costs, while visiting the website of each potentially desirable retailer, who may well be wholly unknown to the buyer, and often experience difficulty in searching products based on price and other factors. Sellers, on the other hand, also have difficulties, for example, in making in-roads into a foreign market. The seller is burdened with managing and operating the website and loses potential business when buyers fail to effectively search the Internet and access the desired website.

15

#### SUMMARY OF THE INVENTION

Accordingly, in order to overcome the above drawbacks of conventional methods of Internet commerce, it is the object of the present invention to provide a method by which commerce between Internet buyers and sellers may be facilitated.

It is another object of the present invention to provide an apparatus suitable for realizing the above method.

Therefore, in accordance with a preferred embodiment of the present invention, there is provided a method for facilitating commerce between a registered buyer and a seller using a mediating computer situated between a buyer terminal and a seller terminal, the mediating computer including a

database of registered buyers and acting as a server for processing transactions via a network. The method comprises the steps of: receiving a document file via the network from the seller terminal at the mediating computer, the document  
5 file being prepared by the seller and containing a transaction proposal for the registered buyer; reconstructing the document file into a predetermined format, using the mediating computer, the reconstructed document file including predetermined product data, and transmitting via the network the reconstructed  
10 document file from the mediating computer to the buyer terminal; receiving buyer reply data via the network from the buyer terminal at the mediating computer; reconstructing the buyer reply data into a buyer reply list file, using the mediating computer, the buyer reply list file including the buyer reply data, and  
15 transmitting the buyer reply list file via the network from the mediating computer to the seller terminal; generating a selected buyer list file from the buyer reply list file received at the seller terminal, the selected buyer list file consisting of registered buyers selected by the seller and being transmitted  
20 via the network to the mediating computer; and transmitting buyer connection means data corresponding to the selected buyer list file via the network from the mediating computer to the seller terminal.

In the above method, seller connection means data is  
25 inserted in the document file containing the transaction proposal, but the seller connection means data is excluded from the reconstructed document file transmitted to the buyer terminal. Also, the buyer reply data includes a buyer reply

document and buyer connection means data, but the buyer connection means data is excluded from the buyer reply list file transmitted to the seller terminal.

In addition, in accordance with another aspect of the present invention, there is further provided a similar method by which the seller terminal and buyer terminals are interchanged to enable plural registered sellers to receive proposals of transaction from a given buyer.

It is preferable that the mediating computer further include a seller database and a buyer database storing information such as telephone numbers, addresses, contact names, and the like. The buyer database is comprised of registered buyers.

In accordance with yet another aspect of the present invention, there is further provided an apparatus for facilitating commerce between a seller and a registered buyer using a mediating computer situated between a buyer terminal and a seller terminal, the mediating computer including a database of registered buyers and acting as a server for processing transactions via a network. The apparatus comprises: a seller terminal, connected to the network and provided with a word processor, an Internet browser, and email software, to create a document file containing a transaction proposal for the registered buyer and to make selections from a buyer reply list file; a mediating computer, connected to the network, to receive the document file from the seller terminal, to reconstruct the document file into a predetermined format containing predetermined product data, and to transmit the

reconstructed document file to buyers registered on the mediating computer's database; at least one buyer terminal, connected to the network and provided with a wordprocessor, an Internet browser, and email software, to receive the  
5 reconstructed document file from the mediating computer and to transmit a reply messages based on the reconstructed document file, wherein the mediating computer supplies buyer connection means data to the seller terminal based on the reply messages transmitted from the at least one buyer terminal.

10 In addition, in accordance with still another aspect of the present invention, there is further provided a similar apparatus in which the seller terminal and buyer terminals are interchanged to accommodate plural registered sellers connecting to a given buyer proposing a transaction.

15 Importantly, there is no information for identifying the means for connecting to the seller contained in the files sent to the buyers. In the case of a buyer making the initial contact to a plurality of sellers, there is likewise no information for identifying the means for connecting to the buyer contained  
20 in the files sent to the sellers. This enables a service fee to be charged by the operator of the mediating computer in either case.

#### BRIEF DESCRIPTION OF THE DRAWINGS

25 The present invention and the above objects, features, and advantages thereof will become more fully understood and appreciated from the following detailed description read in conjunction with the accompanying set of drawings, in which

like reference numerals denote similar elements, provided...  
by way of illustration only and thus not limiting the invention,  
wherein:

FIG. 1 is a block diagram showing a method and apparatus  
5 for facilitating commerce between buyer and seller according  
to one embodiment of the present invention;

FIG. 2 is a detailed block diagram of the mediating computer  
shown in FIG. 1;

FIG. 3 is a detailed block diagram of the seller terminal  
10 shown in FIG. 1;

FIG. 4 is a detailed block diagram of the buyer terminal  
shown in FIG. 1;

FIG. 5 is a flow chart showing a method for facilitating  
commerce between buyer and seller according to the embodiment  
15 of the present invention shown in FIG. 1;

FIGS. 6 and 7 are samples of transaction proposals created  
and sent by a seller;

FIGS. 8 and 9 are samples of transaction proposals created  
and sent by a buyer;

20 FIG. 10 shows an example of a bulletin board or posted  
webpage containing a list of transaction proposals sent from  
sellers;

FIG. 11 is a block diagram showing a method and apparatus  
for facilitating commerce between buyer and seller according  
25 to another embodiment of the present invention; and

FIG. 12 is a flow chart showing a method for facilitating  
commerce between buyer and seller according to the embodiment  
of the present invention shown in FIG. 11.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, the computer system according to the present invention comprises a seller terminal 300, a buyer terminal 400, and a mediating computer 200, each of which are connected through an open network such as the Internet employing an IP address assignment system according to TCP/IP protocol.

The seller terminal 300 and the buyer terminal 400 are installed with basic programs, such as a wordprocessor, Internet browser, and email software, and are provided with means for connection to the network, e.g., a modem.

Referring to FIG. 2, the mediating computer 200 comprises a central processing unit 204 acting as a main controller, which includes RAM and ROM memories and other typical central processing essentials such as a clock generator and an operating system, an access code processor 202 for encoding and decoding an access code used in the system, a payment processor 206 for processing payments electronically, a telecommunication means 214, e.g., a modem, for connection with the seller terminal 300 and the buyer terminal 400 through the Internet, a sellers database 208, a buyers database 210, and an operational database 212. The databases 208, 210, and 212 are sorted by seller and buyer information, such as address, contact name, telephone number, buyer reply list files, selected buyer list files, and reconstructed files.

Referring to FIG. 3, the seller terminal 300 comprises a central processing unit 302 acting as a main controller, which similarly includes RAM and ROM memories and other typical



central processing essentials such as a clock generator, an operating system, and input/output ports, an access code processor 304 for encoding and decoding an access code used in the system, an input/output means 308 such as a keyboard and monitor or printer, an operational database 308, and a telecommunication means 310, e.g., a modem, for connection with the mediating computer 200 through the Internet.

Referring to FIG. 4, the buyer terminal 400 also comprises a central processing unit 402 acting as a main controller, which similarly includes RAM and ROM memories and other typical central processing essentials such as a clock generator, an operating system, and input/output ports, an access code processor 404 for encoding and decoding an access code used in the system, an input/output means 408 such as a keyboard and monitor or printer, an operational database 406, and a telecommunication means 410, e.g., a modem, for connection with the mediating computer 200 through the Internet.

Using the seller terminal 300 and FTP protocol, a seller sends a document file to the mediating computer 200. The document file is a transaction proposal directed to a potential buyer or buyers, prepared using an ordinary wordprocessor.

At the same time, the seller may also send a selected buyer list file, which is stored in the operational database 306 based on reconstructed files previously received from the mediating computer 200 and is created by selecting from among buyers who have previously replied to the mediating computer 200 with a buyer reply list file including buyer reply data.

The reconstructed file is created with a predetermined format

according to a corresponding document file originally received at the mediating computer 200 from the seller terminal 300.

The mediating computer 200, which operates (or hosts) a website serving a predetermined market, acts as a mediating  
5 trader between buyers and sellers, typically, using a modem and TCP/IP protocol for connecting to the network or the Internet.

The mediating computer 200 receives the document file from the seller terminal 300 via the Internet and automatically reconstructs the document file into a predetermined format.

10 Though the document file includes pertinent product (or service) data, such as pricing and availability information, a brief description of the goods/services, packaging details, and the like, there is no information included for identifying the means for connecting to the seller terminal, i.e., no  
15 telephone number, URL, any other seller connection means data.

Based on the received document file, the mediating computer 200 stores a reconstructed file into the operational database 212.

Referring to FIG. 5, a method for mediating between sellers  
20 and buyers to facilitate commerce between buyer and seller will be described. Here, it is assumed that the mediating computer 200 includes a list of registered buyers stored in the buyer database 210.

In a step 1000, a seller creates a document file using  
25 the seller terminal 300. The document file, which contains a transaction proposal for a registered buyer, is transmitted and received via the network (e.g., Internet) from the seller terminal 300 to the mediating computer 200.

In a step 1100, the mediating computer 200 reconstructs the document file into a predetermined format which contains product data but, notably, contains no seller connection means data. The mediating computer 200 sends the reconstructed file  
5 to the buyer terminal 400 of a potential buyer. In this step, the buyer terminal 400 belongs to a registered buyer, i.e., one whose buyer information is pre-stored in the buyer database 210 of the mediating computer 200.

In a step 1200, the registered buyers receive the  
10 reconstructed document file from the mediating computer 200 and, if warranted, creates a reply message (reply data) accordingly. The reply file is then sent from the buyer terminal 400 to the mediating computer 200. A potential buyer may be inclined to buy the proffered goods or services or may imply  
15 wish to contact the seller before acting further. The mediating computer 200 thus receives a list of reply messages.

In a step 1300, the mediating computer 200 reconstructs the reply messages into a buyer reply list file, which is sent to the seller terminal 300. The buyer reply list file includes  
20 the reply messages of all responsive buyers but, notably, excludes any information for identifying the means for connecting to the buyer terminals, i.e., no telephone numbers, URLs, any other buyer connection means data.

In a step 1400, the seller chooses from among the buyers  
25 of the buyer reply list file to generate a selected buyer list file. The selected buyer list file is sent to the mediating computer 200.

In a step 1500, the final step, the mediating computer

200 sends the previously omitted buyer connection means data to the seller terminal 300.

In more detail, in the step 1000 of FIG. 5, which transpires in the seller terminal 300, a document file is created for the purpose of transaction mediation and sent to the mediating computer 200. The document file includes information for identifying the means for connecting to the seller terminal, such as the companys telephone number or email address. The seller may also include the URL for an electronic catalog or a classification selection to narrow the scope of buyers who will ultimately receive the document file from the mediating terminal 200. By sending the document file to the mediating computer 200, the sellers requests mediation.

The step 1100 of FIG. 5 will now be described in greater detail.

In the mediating computer 200, a received document file is reconstructed by first retrieving data stored in the operational database 212. The reconstructed file may assume any format, but basically consists of two parts: a header and a body. The header is filled with the seller's information such as the contents of the transaction proposal to the buyers.

The header does not include any information on the means for connecting to the seller terminal. The body is filled with the buyer's information such as name of the buyer or the buyer's representative, which is stored in the buyer database 210.

Besides the buyer information, the mediating computer 200 also retrieves the buyer connection means data from the buyer database 210, in a step 1102. The buyer information

is inserted directly in the reconstructed file, but the buyer connection means data is first converted into a virtual connection means and a secondary means for connecting to the seller terminal 300, in a step 1104. The converted buyer  
5 connection means data, i.e., the virtual and secondary connection means, is inserted in the reconstructed file together with the unconverted information which is directly inserted, and the document file is thus reconstructed in a step 1106.

Alternatively, the seller connection means data may be  
10 converted into a reply link, appearing as a button on a webpage, for directly connecting the buyer terminal 400 to the mediating computer 200, and inserted in the reconstructed file.

In a step 1108, the reconstructed file is sent to the buyer terminals of the registered buyers in accordance with  
15 specifications provided by the seller, since the reconstructed file also includes any additionally provided information such as the URL for, say, an electronic catalog.

In the step 1200 of FIG. 5, upon receipt of the reconstructed file from the mediating computer 200 at the buyer terminal  
20 400, the buyer creates a reply message, which is an electronic document containing buyer reply data as well as buyer connection means data. The reply message is transmitted electronically from the buyer terminal 400 to the mediating computer 200 using the return function of the email software. Alternative methods  
25 of transmission include facsimile and audio/video telecommunication.

In the step 1300 of FIG. 5, the mediating computer 200 compiles a list of replying buyers, called a buyer reply list

file, which identifies the prospective buyers and service fees, and sends the buyer reply list file to the seller terminal 300. The compiled buyer reply list file includes a check box, or similar correlative means, for each replying buyer. Thus, 5 the reply list will enable the seller to make selections from the list. The mediating computer may also insert a preferred method of payment, the amount for which will be in direct proportion to the number of selected buyers. A variety of buttons may also be inserted for a selection of the payment 10 means, such as credit card or cash (wire) transference, and for confirming the seller's intentions before sending the selection results back to the mediating computer 200.

In the step 1400 of FIG. 5, a selected buyer list file is generated by the seller terminal 300. Here, the seller 15 checks the reply messages contained in the buyer reply list file received at the seller terminal 300, to determine which prospective buyers are to be contacted, and clicks on the corresponding check box to select the buyer or buyers. If applicable, the payment means is also checked. The selected 20 buyer list file is sent to the mediating computer 200, for example, by operating (clicking on) a confirmation button.

The operation of the above-described system will now be explained in detail.

First, a seller creates a document file containing a 25 transaction proposal for a plurality of buyers and sends via the Internet the document file to the mediating computer for proposing of deal to buyer through the Internet. Seller connection means data is inserted in the transmitted document

file

The mediating computer reconstructs the document file into any document format desired. The file reconstruction is automatic, and the resulting document format can be realized  
5 as an ordinary electronic document essentially consisting of a header and a body. The header containing the pertinent information from the seller but not the seller's contact information. In this manner, while no means for directly contacting the seller is transferred to the buyer, the company  
10 information is presented as a tailored business letter, since pertinent buyer information stored in the buyer database of the mediating computer is inserted in the body of the reconstructed file. Thus, although the mediating computer sends the same reconstructed file to many sellers simultaneously,  
15 each receiving buyer can receive a personalized electronic document.

In the reconstructed file, the seller connection means data is converted into a virtual connection means and a secondary connection means (or a reply button) for contacting the seller.  
20 The virtual connection means and secondary connection means (or the reply button) are necessary because, if the mediating computer sent in the step 1100 real means for connecting, the buyers would be able to contact the with the seller directly by that means, obviating the function of the mediating computer.

25 Next, replying buyers, i.e., registered buyers creating and transmitting a buyer reply list file together with buyer connection means data to the mediating computer, use a return button, facsimile transmission, audio/video (voice/picture)

telecommunication to send an electronic document via the Internet. Upon receipt, the mediating computer reconstructs the reply message into a buyer reply list file omitting the buyer connection means data, inserting a check box corresponding  
5 to each replying buyer for selection by the seller. The reconstructed file also includes the mediation fee, which is calculated based on and in direct proportion to the number of buyers to be selected, as well as buttons confirming the mediation payment and the intended means for payment. Here,  
10 it should be appreciated that the "buttons" mentioned herein are visualized on a computer screen and that other such buttons may be inserted as desired. The thus-reconstructed file is sent to the seller terminal, such that the means to connect to the respective buyers are unknown to the seller.

15 Based on the reconstructed file as received at the seller terminal, the seller chooses from among listed replies, checking (clicking on) the check boxes of those deemed desirable for carrying out the originally proposed transaction, as well as the various buttons regarding payment. Then, the mediation  
20 payment is electronically remitted through the telecommunication means and processed in the payment processor of the mediating computer. In a preferred embodiment, a seller could select, for example, a "reply to message" button after reading a reply message of interest. The payment is based  
25 on the number of such replies selected by the seller.

Upon completion of the mediation process, the mediating computer sends to the seller terminal the buyer connection means data, which includes the registered names of the selected



buyers and all other necessary data, so that the seller terminal may be connected directly to the buyer terminals.

By the method and apparatus according to present invention as described above, either a seller or a buyer can propose  
5 such transactions interchangeably and simultaneously, with the mediating computer supplying reconstructed replies to the plural buyers or sellers. In addition, it is preferable that the mediation be accomplished using the Internet and a website posting a bulletin board showing the realtime status of the  
10 consultations.

FIGS. 6 and 7 are screen samples of seller proposals, each showing one example of the appearance of a document file to be sent to the mediating computer 200. Meanwhile, FIGS. 8 and 9 are samples of reconstructed files received at the  
15 buyer terminals 400 by buyers, each showing one example of the appearance of a reconstructed document file sent by the mediating computer 200. FIG. 10 shows an example of a bulletin board or posted webpage containing a list of transaction proposals sent from sellers.

20 FIGS. 11 and 12 demonstrate another embodiment of the present invention, by which a buyer may contact a plurality of sellers. In this embodiment, similar to the first embodiment, a document file created by a buyer and containing a transaction proposal, one proffering a purchase of goods or services rather  
25 than a sale of the same, is sent from a buyer terminal 400 to the mediating computer 200. All subsequent steps correspond to those described in connection with the first embodiment, save in a reversed direction. Thus, in the second embodiment,

there is an exchange of position and relationship between the seller and buyer with respect to the first embodiment, while the mediating computer serves the same role.

That is, in a step 2000, a buyer creates a document file  
5 using the buyer terminal 400. The document file, which contains a transaction proposal from a buyer, is transmitted and received via the network (e.g., Internet) from the buyer terminal 400 to the mediating computer 200.

In a step 2100, the mediating computer 200 reconstructs  
10 the document file into a predetermined format which contains descriptive information of a desired product but, notably, contains no buyer connection means data. The mediating computer 200 sends the reconstructed file to the seller terminal 300 of a potential seller

15 In a step 2200, registered sellers receive the reconstructed document file from the mediating computer 200 and, if warranted, creates a reply message (reply data) accordingly. The reply file is then sent from the seller terminal 300 to the mediating computer 200.

20 In a step 2300, the mediating computer 200 reconstructs the reply messages into a seller reply list file, which is sent to the buyer terminal 400. The seller reply list file includes the reply messages of all responsive sellers but, notably, excludes any information for identifying the means  
25 for connecting to the seller terminals, i.e., no telephone numbers, URLs, any other seller connection means data.

In a step 2400, the seller chooses from among the buyers of the seller reply list file to generate a selected seller

list file. The selected seller list file is sent to the mediating computer 200.

In a step 2500, the final step, the mediating computer 200 sends the previously omitted seller connection means data  
5 to the buyer terminal 400.

While the technical sprit of the present invention has been disclosed with the reference to the appended drawings, the descriptions in the present specification are for illustrative purposes only and should not be regarded as limiting  
10 the invention. Furthermore, those skilled in the art will appreciate that various modifications, additions, and substitutions are possible without departing from the scope and sprit of the present invention.

In particular, it should be appreciated that the  
15 versatility of the Internet, email software, and any displayed pages thereof allow for unlimited variations in the appearance of the reconstructed file and will provide the practitioner with the means to enhance the features of the basic concept and in turn to promote the attractiveness of the system to  
20 users. Therefore, it should be understood that the present invention is limited only to the accompanying claims, and equivalents thereof, to include the aforementioned modifications, additions, and substitutions.

What is claimed is:

1. A method for facilitating commerce between a registered buyer and a seller using a mediating computer situated between  
5 a buyer terminal and a seller terminal, the mediating computer including a database of registered buyers and acting as a server for processing transactions via a network, said method comprising the steps of:

(step 1000) receiving a document file via the network  
10 from the seller terminal at the mediating computer, the document file being prepared by the seller and containing a transaction proposal for the registered buyer;

(step 1100) reconstructing the document file into a predetermined format, using the mediating computer, the  
15 reconstructed document file including predetermined product data, and transmitting via the network the reconstructed document file from the mediating computer to the buyer terminal;

(step 1200) receiving buyer reply data via the network from the buyer terminal at the mediating computer;

20 (step 1300) reconstructing the buyer reply data into a buyer reply list file, using the mediating computer, the buyer reply list file including the buyer reply data, and transmitting the buyer reply list file via the network from the mediating computer to the seller terminal;

25 (step 1400) generating a selected buyer list file from the buyer reply list file received at the seller terminal, the selected buyer list file consisting of registered buyers selected by the seller and being transmitted via the network

to the mediating computer; and

(step 1500) transmitting buyer connection means data corresponding to the selected buyer list file via the network from the mediating computer to the seller terminal.

5

2. The method as claimed in claim 1, wherein:

in said step 1000, seller connection means data is inserted in the document file containing the transaction proposal, and

in said step 1100, the seller connection means data is  
10 excluded from the reconstructed document file transmitted to the buyer terminal.

3. The method as claimed in claim 1, wherein:

in said step 1200, the buyer reply data includes a buyer  
15 reply document and buyer connection means data, and

in said step 1300, the buyer connection means data is excluded from the buyer reply list file transmitted to the seller terminal.

20 4. The method as claimed in claim 1, wherein, in said step 1100, seller connection means data is represented visually as a reply link for directly connecting the buyer terminal to the mediating computer, the seller connection means data being inserted in the reconstructed document file transmitted  
25 to the buyer terminal.

5. The method as claimed in claim 4, wherein the buyer reply data is transmitted directly to the mediating computer

by operating the reply link.

6. The method as claimed in claim 1, wherein, in said step 1300, the buyer reply list file comprises at least one  
5 check box corresponding to a replying buyer for selection by the seller.

7. The method as claimed in claim 6, the buyer reply list file further comprising:  
10 mediating fee amount data;  
a pay link for initiating mediation; and  
payment means selector for the seller to select a payment means.

15 8. The method as claimed in claim 6, wherein the mediating fee amount is based on the number of selected buyers to be selected by the seller.

9. The method as claimed in claim 6, wherein the mediating  
20 fee amount is in direct proportion to the number of selected buyers to be selected by the seller.

10. The method as claimed in claim 6, the buyer reply list file further comprising a confirmation link for  
25 transmitting the selected buyer list file to the mediating computer.

11. The method as claimed in claim 1, wherein the buyer

reply data is posted as part of a web page accessible on the network.

12. The method as claimed in claim 1, wherein the buyer  
5 reply data is transmitted electronically.

13. The method as claimed in claim 1, wherein the  
transmitted buyer reply data includes video information.

10 14. The method as claimed in claim 1, wherein the  
transmitted buyer reply data includes audio information.

15 15. The method as claimed in claim 1, wherein, in said  
step 1000, a seller catalog is inserted in the document file  
containing the transaction proposal, the seller catalog  
comprising URL information corresponding to predetermined  
products.

20 16. The method as claimed in claim 15, wherein, in said  
step 1100, the seller catalog is inserted in the reconstructed  
document file transmitted to the buyer terminal.

25 17. The method as claimed in claim 1, wherein, in said  
step 1000, a selection of buyer classification is inserted  
in the document file.

18. The method as claimed in claim 1, wherein, in said  
step 1100, the reconstructed document file transmitted to the

buyer terminal is an electronic document having a header containing seller information.

19. The method as claimed in claim 1, wherein, in said  
5 step 1100, registered buyer data stored in the database of the mediating computer is inserted in the reconstructed document file transmitted to the buyer terminal.

20. The method as claimed in claim 1, wherein, in said  
10 step 1100, seller connection means data is converted to a virtual means and secondary means for connecting to seller, the virtual and secondary means being inserted to the reconstructed document file.

15 21. The method as claimed in claim 1, wherein, in said step 1400, payment is remitted by the seller when transmitting the selected buyer list file to the mediating computer, the mediating fee amount data being determined based on the number of selected buyers.

20

22. The method as claimed in claim 1, wherein, in said step 1400:

the selected buyer list file is generated by the seller checking the transmitted buyer reply data and operating a buyer  
25 selection link corresponding to the buyer reply data of a selected buyer contained in the buyer reply list file, the operation of the buyer selection link selecting a prospective buyer, and



a remittance of electronic funds is processed according to a selected payment means, the operation of a confirmation link remitting the electronic funds.

5        23. The method as claimed in claim 1, wherein the said means for connecting to the said chosen buyers is e-mail.

24. A method for facilitating commerce between a buyer and a registered seller using a mediating computer situated  
10 between a buyer terminal and a seller terminal, the mediating computer including a database of registered sellers and acting as a server for processing transactions via a network, said method comprising the steps of:

(step 2000) receiving a document file via the network  
15 from the buyer terminal at the mediating computer, the document file being prepared by the buyer and containing a transaction proposal for the registered seller;

(step 2100) reconstructing the document file into a predetermined format, using the mediating computer, the  
20 reconstructed document file including predetermined product data, and transmitting via the network the reconstructed document file from the mediating computer to the seller terminal;

(step 2200) receiving seller reply data via the network from the seller terminal at the mediating computer;

25        (step 2300) reconstructing the seller reply data into a seller reply list file, using the mediating computer, the seller reply list file including the seller reply data, and transmitting the seller reply list file via the network from

the mediating computer to the buyer terminal;

(step 2400) generating a selected seller list file from the seller reply list file received at the buyer terminal, the selected seller list file consisting of registered sellers  
5 selected by the buyer and being transmitted via the network to the mediating computer; and

(step 2500) transmitting seller connection means data corresponding to the selected seller list file via the network from the mediating computer to the buyer terminal.

10

25. An apparatus for facilitating commerce between a seller and a registered buyer using a mediating computer situated between a buyer terminal and a seller terminal, the mediating computer including a database of registered buyers and acting  
15 as a server for processing transactions via a network, said apparatus comprising:

a seller terminal, connected to the network and provided with a wordprocessor, an Internet browser, and email software, to create a document file containing a transaction proposal  
20 for the registered buyer and to make selections from a buyer reply list file;

a mediating computer, connected to the network, to receive the document file from said seller terminal, to reconstruct the document file into a predetermined format containing  
25 predetermined product data, and to transmit the reconstructed document file to buyers registered on the mediating computer's database;

at least one buyer terminal, connected to the network

and provided with a wordprocessor, an Internet browser, and email software, to receive the reconstructed document file from said mediating computer and to transmit a reply messages based on the reconstructed document file,

5        wherein said mediating computer supplies buyer connection means data to said seller terminal based on the reply messages transmitted from said at least one buyer terminal.

26. The apparatus as claimed in claim 25, wherein said  
10       mediating computer further comprises a seller database and a buyer database respectively storing seller information and buyer information.

27. The apparatus as claimed in claim 25, wherein seller  
15       connection means data is included in the document file containing the transaction proposal and is excluded from the reconstructed document file transmitted to the buyer terminal.

28. The apparatus as claimed in claim 25, wherein the  
20       buyer reply data includes a buyer reply document and buyer connection means data, and the buyer connection means data is excluded from the buyer reply list file transmitted to the seller terminal.

25       29. An apparatus for facilitating commerce between a buyer and a registered seller using a mediating computer situated between a buyer terminal and a seller terminal, the mediating computer including a database of registered sellers and acting

as a server for processing transactions via a network, said...  
apparatus comprising:

a buyer terminal, connected to the network and provided  
with a wordprocessor, an Internet browser, and email software,  
5 to create a document file containing a transaction proposal  
for the registered seller and to make selections from a seller  
reply list file;

a mediating computer, connected to the network, to receive  
the document file from said buyer terminal, to reconstruct  
10 the document file into a predetermined format containing  
predetermined product data, and to transmit the reconstructed  
document file to sellers registered on the mediating computer's  
database;

at least one seller terminal, connected to the network  
15 and provided with a wordprocessor, an Internet browser, and  
email software, to receive the reconstructed document file  
from said mediating computer and to transmit a reply messages  
based on the reconstructed document file,

wherein said mediating computer supplies seller connection  
20 means data to said buyer terminal based on the reply messages  
transmitted from said at least one seller terminal.

30. An apparatus as claimed in claim 29, wherein said  
mediating computer further comprises a seller database and  
25 a buyer database respectively storing seller information and  
buyer information.

31. The apparatus as claimed in claim 29, wherein buyer

connection means data is included in the document file containing the transaction proposal and is excluded from the reconstructed document file transmitted to the seller terminal.

- 5        32. The apparatus as claimed in claim 29, wherein the seller reply data includes a seller reply document and seller connection means data, and the seller connection means data is excluded from the seller reply list file transmitted to the buyer terminal.

FIG. 1

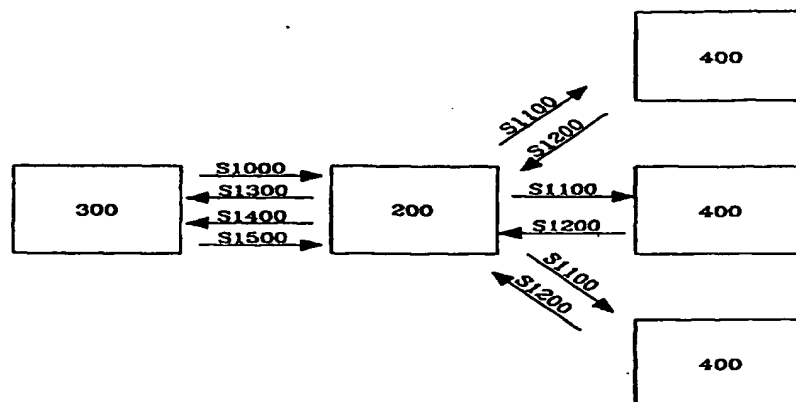


FIG. 2

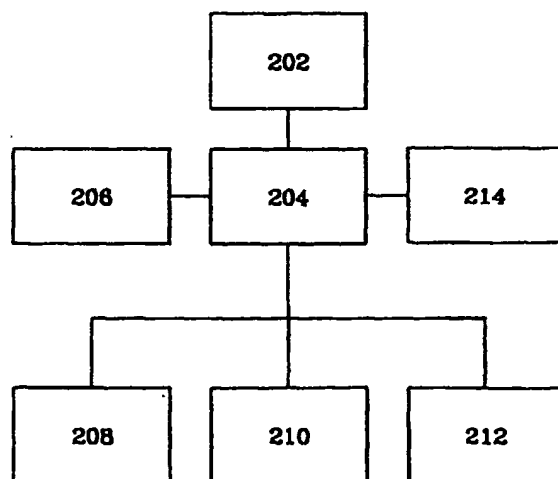


FIG. 3

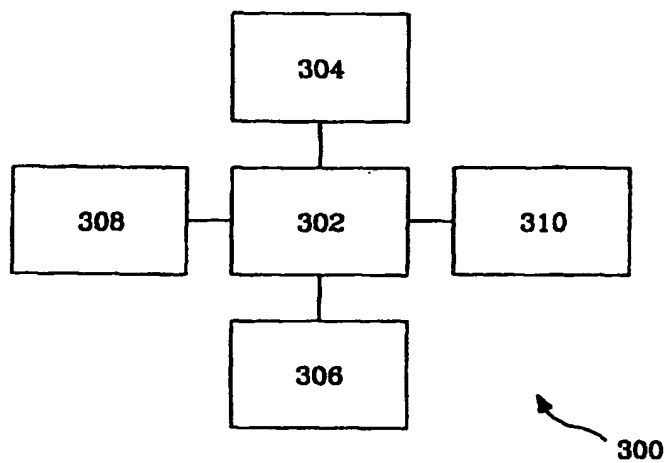


FIG. 4

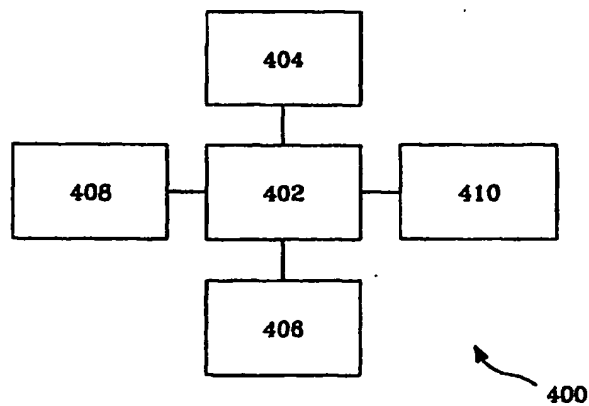


FIG. 5

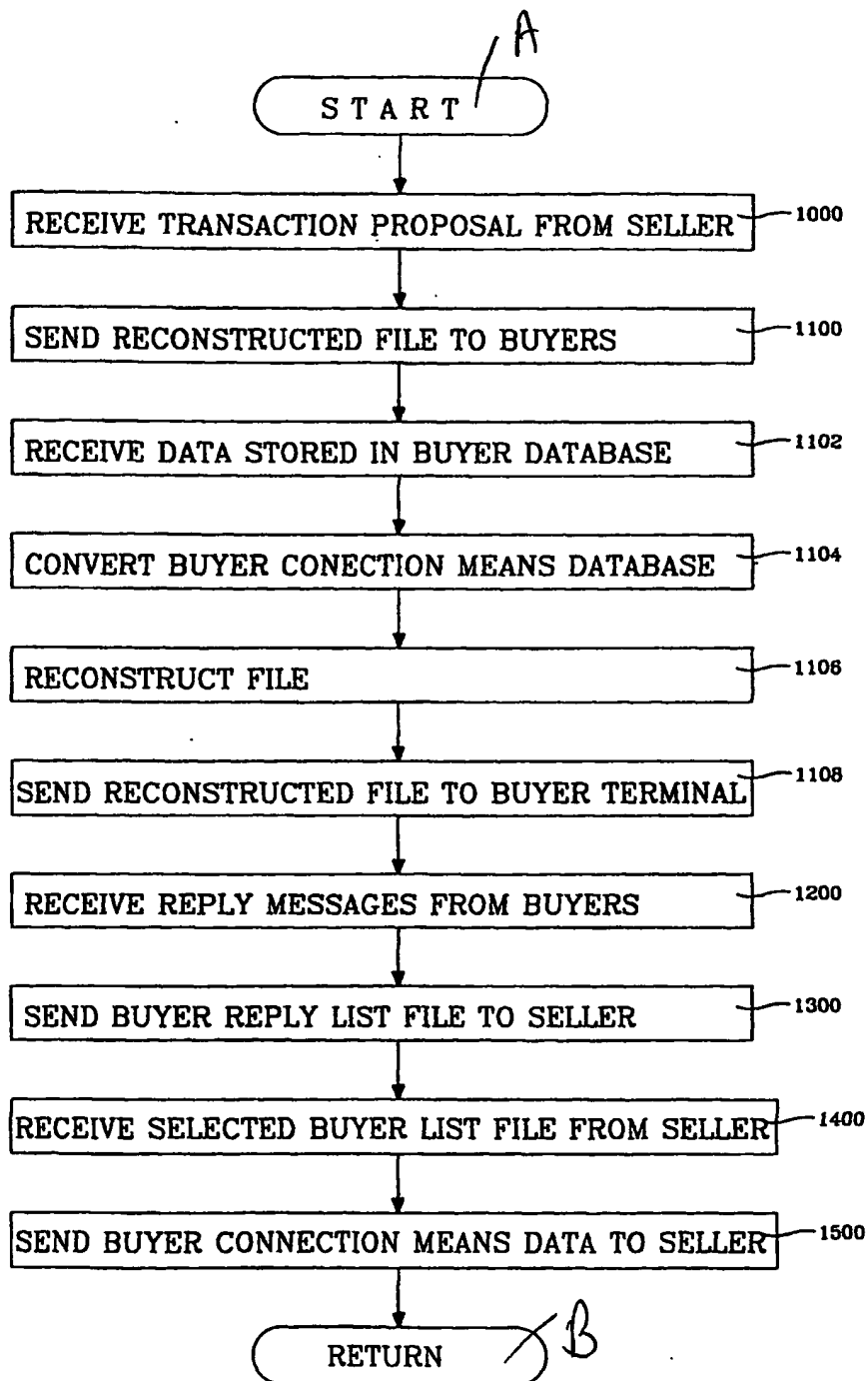




FIG. 6

e-BizMatching : Step 1 - Microsoft Internet Explorer

## The Procedure of e-BizMatching Service

Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Step 7 Step 8 Step 9

**Step 1. You apply e-BizMatching**

You create a business proposal to the targeted buyers of selected category from 657 sub-categories. All Your Contact Information fields are filled in automatically. You just fill in Business Proposal fields in our application form.

< e-BizMatching Application Form >

**Your Contact Information**

Company	e-Trade Co., Ltd.		
Contact Person	Seo Jung	Job Title	Staff
E-Mail	seo@e-trader.com		
Phone	02-2-502-0040	Fax	02-2-508-1780
Address	1F, Yeungjeon Bld. 635-17, Yoksam-dong, Gangnam-Gu, Seoul		
Website URL	www.e-trader.com		

Your Contact Information  
Contact information fields are automatically filled in based on the information you entered as an e-Trade.com member.

**Business Proposal** \* required field

This business proposal is sent to the targeted buyers.  
Please provide reliable information as much as possible.

Product Name:  → Product Name  
Enter the name of product.

Product-specific URL:  → Product-specific URL  
Enter the product-specific URL.

FIG. 7

**e-BizMatching : Step 1 - Microsoft Internet Explorer**

<b>Product name</b>	Handy Mill and Food Mixer	→ <b>Product Name</b> Enter the name of product.
<b>Product-specific URL</b>	www.sso-kang.co.kr/newproduct/group_2 or www.e-trader.com/product/product2.htm	→ <b>Product-specific URL</b> Enter the webpage address of your product.
<b>Company introduction</b>	Dear Sir / Madam,  We are pleased to get in touch with you at the first time .	→ <b>Company Introduction</b> Enter a brief company introduction.
<b>Product Description</b>	We expect that our handy mill and food mixer will be very salable product in your market because of it's quality and price are very competitive and also presently, this mixer is a hit product in Korea home shopping channel and TV	→ <b>Product Description</b> Write a specific and detailed product information.
<b>Complimentary Close</b>	Best regards, Phoenix Home Appliances Co., Ltd. Name: John Smith Job Title: Exporting Manager	→ <b>Complimentary Close</b> Automatically attached. Please just check Name and Job Title.
<b>Product Image</b>	D:\WORK\Images\mixer1.jpg D:\WORK\Images\mixer2.jpg <small>* Available up to 7 pictures. * Only jpg, gif files</small>	→ <b>Product Image</b> Uploaded up to 2 image files.
<b>Select Category</b>	Juicers/Mixers	→ <b>Select Category</b> Select only one category from 657 sub-categories. The business proposal is sent to buyers related the selected category. Inappropriate selected category will be changed to the right one by e-Trader.com.

FIG. 8

e-BizMatching - Step 3 - Microsoft Internet Explorer

< Business Proposal received by buyers >

**Phoenix Home Appliances Co., Ltd.** → Your Company Name

P.O. Box 123, Sunnyside, NY 12345 USA  
TEL: 1-540-430-1000 FAX: 1-540-430-2000 → Your Contact Information

Dec. 1, 2000  
To: Terry Brown / Marketing Manager  
Attn: Global Trade Company  
From: Handy Mill and Food Mixer → Buyer's Information

Product Name

Dear Sir / Madam,

We are pleased to get in touch with you at the first time.

Our company was founded in 1984 and is a exceptional manufacturer of electronic home appliances. We have a wonderful workplace in a two-story concrete building.

Our company has become a leader in the business of domestic electronic appliances using a conveyer system to enhance production efficiency and product quality and making an investment in technology actually to develop new products. All our employees will continue our efforts to meet consumers' demands with high and reliable quality of products.

**Product Description:**

We expect that our handy mill and food mixer will be very suitable product in your market because of its quality and price are very competitive.

If you are interested in our mixer, please contact us without any hesitation. We are able to offer you with best price & good quality.

**Handy Mill**

- Multi-function to crush, mix, and cut in one product.
- Transparent vessels to be able to observe contents.
- Available to use vessels instead of cups.
- Double safety device to prevent danger.
- Designed small type to be easy to use and keep.
- Easy to clean and separate.

For more detail please inform us.  
Look forward to getting a prompt response from you.

Best regards,  
Phoenix Home Appliances Co., Ltd.

**Proposal Contents**  
Proposal content is made up of company introduction and product description you entered in Apply Form.






FIG. 9

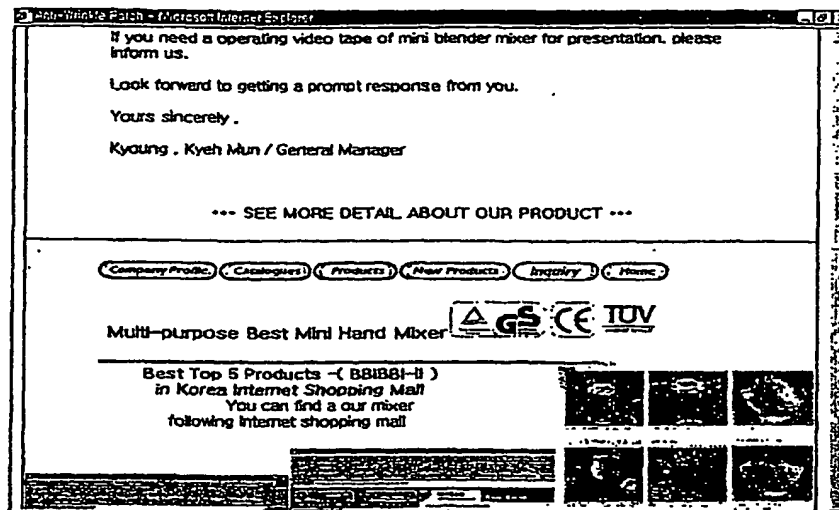


FIG. 10

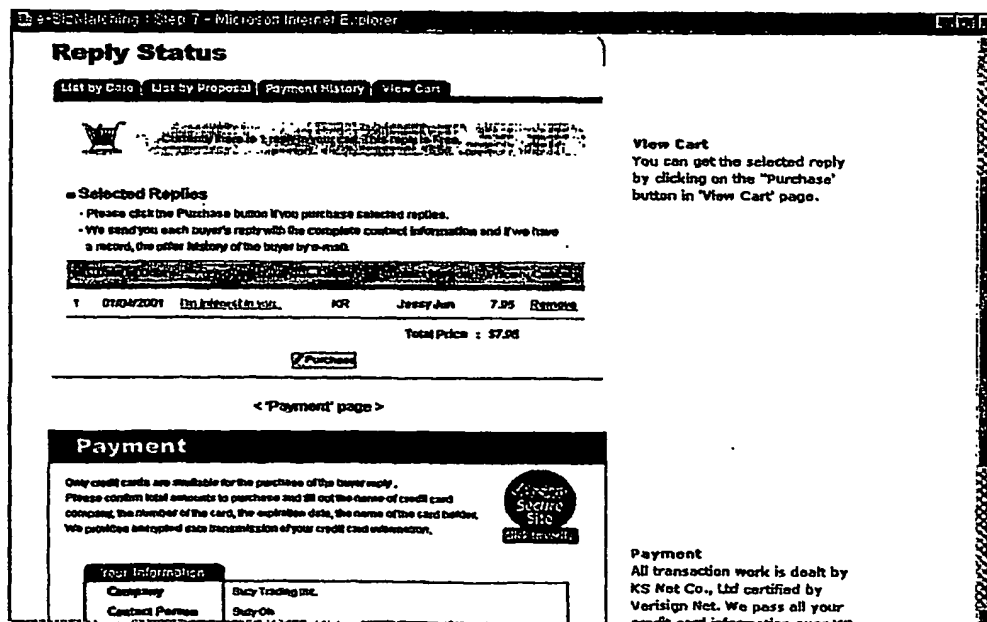


FIG. 11

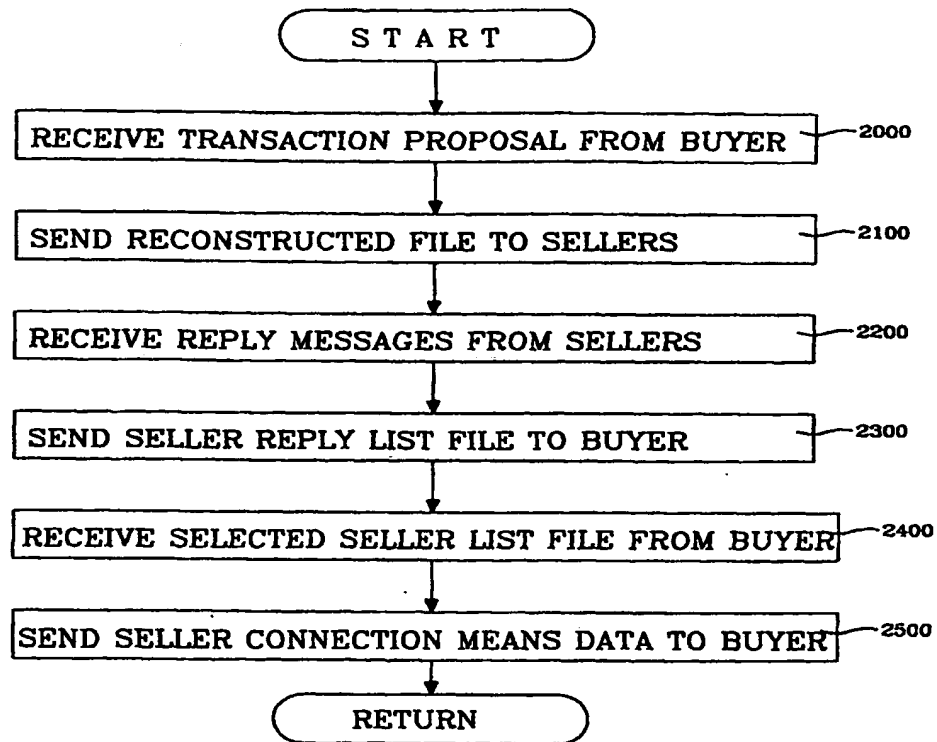
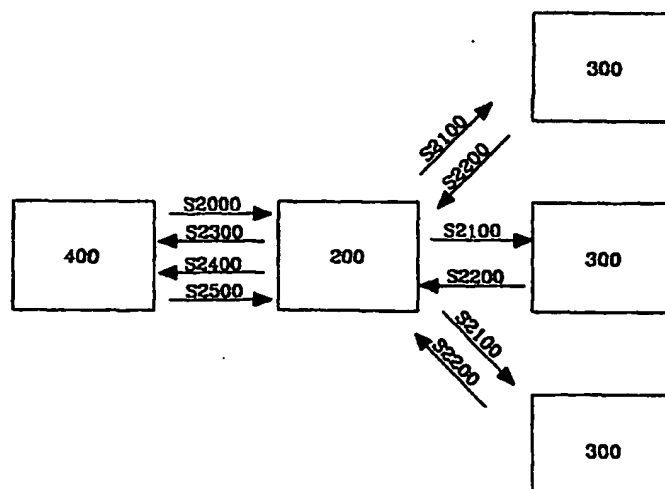


FIG. 12



# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR01/00331

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
IPC7 G06F 17/60		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
IPC G06F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
KIPONET. PAJ		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO,9821679(MICROSOFT CORP.) 22 JUNE 1998 see the whole document	1
Y	EP,0822535(AT & T CORP.) 4 FEBRUARY 1998 see the whole document	1
A	JP,11219389 (HITACHI LTD) 10 AUGUST 1999 see Abstract	1-32
A	WO,9837675(VERIFONE INC, ROWNEY KEVIN T B.) 27 AUGUST 1998 see claims	1-32
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"B" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&amp;" document member of the same patent family</p>		
Date of the actual completion of the international search		Date of mailing of the international search report
09 JULY 2001 (09.07.2001)		10 JULY 2001 (10.07.2001)
Name and mailing address of the ISA/KR		Authorized officer
Korean Intellectual Property Office Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon Metropolitan City 302-701, Republic of Korea Facsimile No. 82-42-472-7140		CHO, Ji Hun  Telephone No. 82-42-481-5993

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR01/00331

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP,0822535	4 FEBRUARY 1998	US, 69190096 CA, 2210281	19960801 19980201
WO,9837675	27 AUGUST 1998	AU,6331198	19980909

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